

Abstract

With a method for the contactless determination of a thickness of a layer (20) made of electrically-conductive material of a component (17), a sensor composed of a coil form (13) and a coil (14) is positioned in the vicinity of the component (17) to be measured.

5 The method is based on a combination of the principles of induction and eddy current.

The thickness of the layer (20) is determined using a plurality of measuring and evaluation steps in which the coil (14) is acted upon with a first alternating current frequency f and its inductance and resistance values are evaluated. The distance

10 between the coil form (13) and, therefore, the coil (14), and the component (17) is derived from the resistance value R of the coil (14) acted upon with alternating current frequency f .